

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 91-087

NPDES NO. CA0028525

WASTE DISCHARGE REQUIREMENTS FOR:

CRITERION CATALYST COMPANY
PITTSBURG, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The Criterion Catalyst Company, henceforth called the Discharger, submitted an NPDES application (Report of Waste Discharge) dated September 20, 1990, for the reissuance of NPDES Permit No. CA0028525.
2. The discharge of wastewater from these facilities is currently regulated by Waste Discharge Requirements contained in Order No. 86-18, adopted by the Board on March 27, 1986.
3. The Discharger manufactures catalysts for the petroleum and petrochemical industries. The discharger uses non-contact cooling water to cool the outside of rotary kilns used to dry two different catalyst products. The cooling water is recirculated through two package cooling towers, one for each product area. There is a continuous blowdown from the two towers. Waste 001, the blowdown from the hydrotreater catalyst product, is discharged year-round and averages 26,500 GPD. Waste 002, the blowdown from the other catalyst product, is discharged about 6 months a year and averages 7,200 GPD. The combined discharge, along with some stormwater runoff, flows through an unlined ditch into a canal tributary to Suisun Bay. No additives are used in the cooling water, though some acetic acid is added near the compliance point to assure compliance with the pH requirement.
4. The Board adopted a Revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The provisions of this permit are consistent with the revised Basin Plan.

5. The beneficial uses of Suisun Bay and contiguous waters are:
 - a. Water contact recreation
 - b. Non-contact water recreation
 - c. Navigation
 - d. Ocean commercial and sport fishing
 - e. Wildlife habitat
 - f. Estuarine habitat
 - g. Fish spawning and migration
 - h. Industrial process and service supply
 - i. Preservation of rare and endangered species.
6. The U.S. Environmental Protection Agency and the Board have classified this facility as a minor discharger.
7. The Basin Plan prohibits the discharge of any wastewater which has particular characteristics of concern to beneficial uses at any point which does not receive a minimum initial dilution of at least 10:1, or into any nontidal water or dead-end slough or similar confined water areas, or their immediate tributaries. The receiving waters for this discharge constitute a confined area similar to a dead-end slough.
8. The Board finds that this discharge contains only negligible amounts of pollutants, as no water contacts any product, storage or waste areas of this site. There are therefore no particular characteristics of concern to beneficial uses, and the Basin Plan prohibition does not apply to this waste discharge.
9. The State Board adopted a revised Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (the Thermal Plan) on September 18, 1975. The temperature limitations contained in this Order for this discharge of cooling water are in accordance with the Thermal Plan.
10. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21110) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
11. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency. Effluent limitations of this Order are instead based on the Basin Plan, other State plans and policies, current plant performance, and best professional judgement.

- 12 The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and opportunity to submit their written views and recommendations.
- 13 The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibition

1. The discharge of process waste, or cooling water containing treatment additives is prohibited.

B. Effluent Limitations

1. The discharge of Waste 001 and Waste 002 combined containing constituents in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Maximum Daily</u>
TSS	mg/l	20.	30.
Oil and grease	mg/l	10.	20.
Chromium (VI) *	µg/l		11.
Copper	µg/l		20.
Lead	µg/l		5.6
Zinc	µg/l		58.

* Dischargers may at their option meet this limit as total chromium.

2. The pH of the discharge of Waste 001 and Waste 002 combined shall not exceed 8.5 nor be less than 6.5.
3. The maximum temperature of the discharge shall not exceed the ambient receiving water temperature by more than 20 degrees F. nor shall it exceed 86 degrees F.

4. The survival of three-spine stickleback and fathead minnow (or rainbow trout) in a 96-hour parallel static renewal bioassay of Waste 001 and Waste 002 combined shall not be less than a median of 90 percent survival and a 90 percentile value of not less than 70 percent survival.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the state at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of turbidity or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. pH:

The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The discharger shall comply with the limitations, prohibitions, and other provisions of this order immediately upon its adoption by the Board.
2. This Order shall serve as a National Pollutant Discharge Elimination permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing, provided the Regional Administrator, U.S. Environmental Protection Agency Region 9, has no objections.
3. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(c), and (d), 303, 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or,
 - (b) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

4. The discharger shall comply with the attached Self-Monitoring Program as adopted by the Board, and as may be amended by the Board or the Executive Officer pursuant to EPA regulations 40 CFR 122.62, 122.63, 124.5.
5. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).
6. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements and Definitions," dated December, 1986.
7. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
8. This Order expires on June 19, 1996 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative

Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

9. Order No. 86-18 is hereby rescinded.

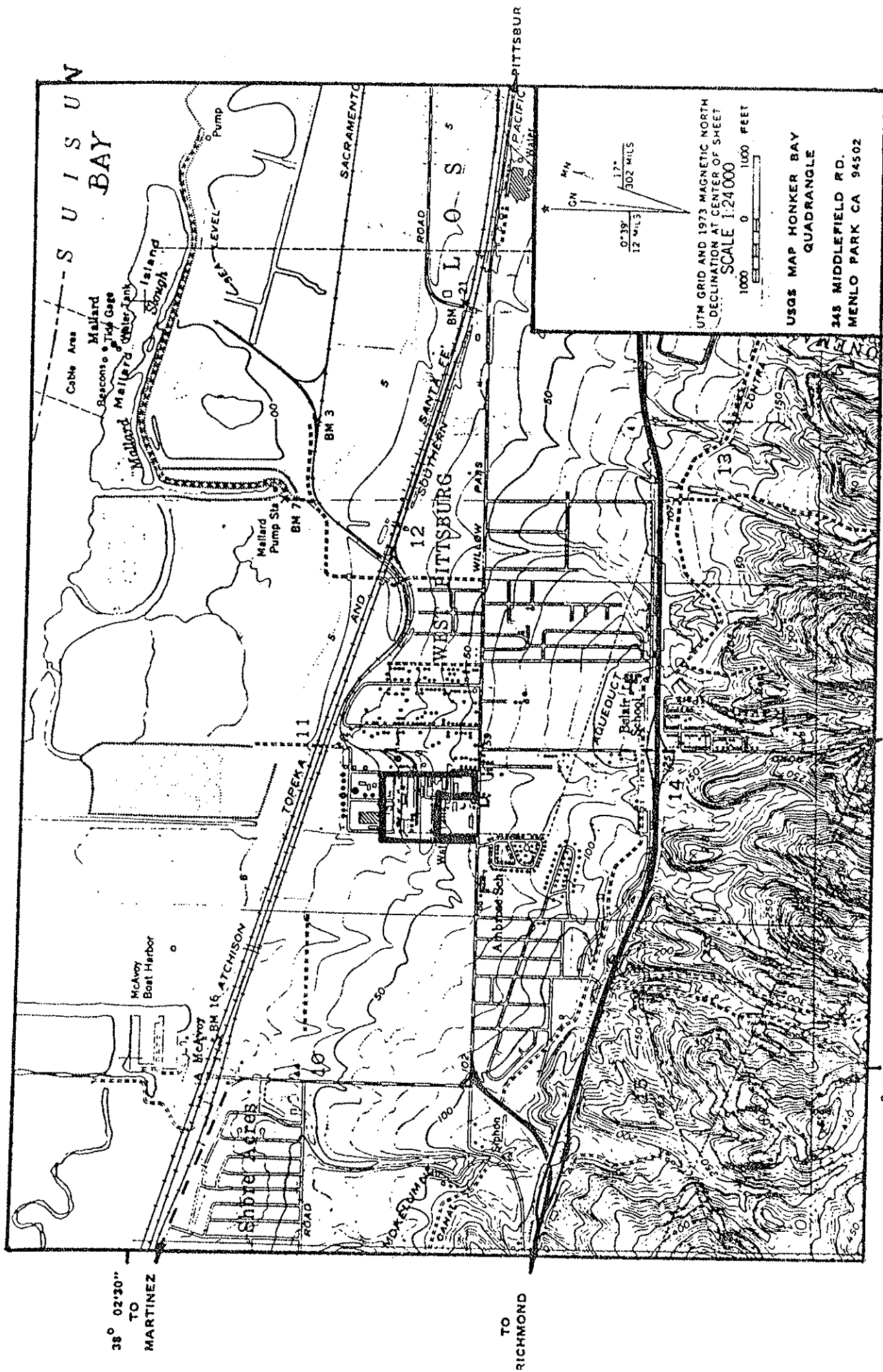
I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 19, 1991.



STEVEN R. RITCHIE
Executive Officer

Attachments:

Location Map
Standard Provisions and Reporting Requirements and Definitions,
dated December, 1986
Self-Monitoring Program, Part B



38° 02'30"
TO
MARTINEZ

TO
RICHMOND

121° 37' 30"

CONCORD

FIGURE 1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

FINAL SELF-MONITORING REQUIREMENTS
FOR

CRITERION CATALYST COMPANY
PITTSBURG
CONTRA COSTA COUNTY

NPDES NO. CA0028525
ORDER NO. 91-087

CONSISTS OF PART A (DATED 12/86)

AND

PART B

SELF-MONITORING PROGRAM

PART B

DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS , OBSERVATIONS

I. Sampling Station Location/Description

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point of discharge of the combined flows of Waste 001 and Waste 002 into the ditch at which point all of both wastes tributary to that outfall are present.

B. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	Located along the drainage ditch 60 feet downstream of Station E-001

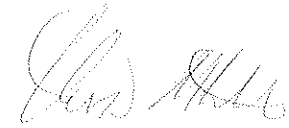
II. Schedule of Sampling and Analysis

- A. The schedule of sampling and analysis shall be that given in Table 1 (attached).
- B. Sample collection, storage, and analysis shall be performed according to the latest 40 CFR Part 136 or other methods approved and specified by the Board or the Executive Officer.
- C. The discharger shall retain and submit (where required) the following information concerning the monitoring program for metallic pollutants:

1. Description of sample stations, times, and procedures
2. Description of sample containers, storage, and holding time prior to analysis.
3. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal and surrogate standards.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established by this Board.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions may be ordered by the Executive Officer or Regional Board, pursuant to 40CFR 122.62 and 124.4.



STEVEN R. RITCHIE
Executive Officer

Effective
Date

6/17/71

Attachments:
Table 1

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

SAMPLING STATION: E-001 C-1

CONSTITUENT

FLOW (GPD)	D	
TSS (mg/l)	M	
O & G (mg/l)	M	
FISH TOXICITY (1)	M	
pH	W	W
TEMPERATURE	W	W
CHROMIUM (TOTAL) (ug/l)	M	
COPPER	M	
LEAD (ug/l)	M	
ZINC (ug/l)	M	
STANDARD OBSERVATIONS		W

Footnotes for Table 1:

M = monthly
Q = quarterly
W = weekly
D = daily

1. To be conducted as a two-species (stickleback and fathead minnow or rainbow trout) parallel static renewal bioassay.